TUBERCULOSIS (TB) SCREENING GUIDELINES FOR DRUG TREATMENT PROGRAMS

Tuberculosis Control Program Health and Human Services Agency San Diego County

INTRODUCTION

Reducing TB disease requires strategies to screen individuals in high-risk groups, and if infected, to provide treatment. Clients at drug treatment facilities and the HIV-infected are among those at high risk for TB. Initiating and maintaining TB screening in these programs is valuable for identifying persons with latent TB infection or actively ill with TB.

Drug treatment programs should have administrative policies in place to provide for screening of all individuals involved in their programs. However, such screening cannot completely eliminate the occurrence of TB in any facility, as even annual screening can miss persons who become infected or ill between screening periods. For this reason, staff should be knowledgeable of TB signs and symptoms. Program policy should insure that any clients, visitors, or staff developing these signs or symptoms should be re-screened, with follow-up medical consultation if indicated.

This document summarizes the concepts and practices recommended for such a process. Further training and assistance in implementation is available through the TB Control Program at the San Diego County Health and Human Services Agency.

ADMINISTRATIVE RECOMMENDATIONS

I. TB Liaison

Programs should designate one staff person as "TB Liaison," and another as backup. These staff can receive training through the TB Control Program and should attend quarterly HIV/TB Liaison meetings through San Diego County Alcohol and Drug Services (ADS). The TB Liaison's role includes the following activities:

- Conduct basic TB education sessions for program residents
- Provide program staff with basic TB education and TB symptom awareness
- Provide consultation to staff for TB-related questions
- Maintain TB screening procedures within the program
- Communicate with TB Control as needed for questions and guidance

II. TB Skin Test (TST) Certification Training

All medical staff giving and reading TB skin tests (TST) should have completed TST certification training. The TB Control Program offers this training. This includes medical staff within a treatment program, as well as staff from other medical facilities contracted for TST services.

TB SKIN TEST SCREENING

The risk of becoming infected with TB is dependent on many factors, including the time spent with, and the close proximity to a person with infectious TB. Because of this, residential program clients are required to have TST screening. Outpatient clients share less time together, but the risk of TB transmission still exists. Therefore, outpatient programs are recommended to adopt these same procedures.

I. Assessment of HIV Risk and HIV Test Status

HIV-infected individuals who are TB infected, have a significantly increased risk of developing TB disease. Intake staff should interview clients to determine HIV risk and HIV test status.

- A. Clients should be interviewed to identify any of the following HIV risk behaviors:
 - Injection drug use
 - Multiple sex partners
 - Male having sex with male
 - Exchange of sex for drugs or money
 - Having received treatment for sexually transmitted infections
 - Unprotected sex with anyone with or at risk for HIV infection
- B. HIV risk and HIV test result follow-up:
 - a. If a person is HIV negative (tested within the last 6 months), follow TB screening guidelines in Section II.
 - b. For those persons with an HIV risk factor and unknown HIV test status, follow TB screening guidelines in Section III.
 - c. If a person is HIV positive, follow TB screening guidelines in Section IV.
 - d. If HIV testing is indicated, recommend and facilitate testing for those clients.
- C. Knowledge of HIV positive status among any person, whether employed, volunteering, or attending a program, must be kept confidential.

II. TB Screening of Persons at Low-Risk for HIV Infection

- A. This category includes:
 - 1. Persons without HIV risk factors
 - 2. Persons who report a negative HIV test in the last six months.
- B. All individuals should be screened for the following criteria before admission and their responses recorded.

1. TB Symptom Screen:

Cough lasting more than 3 weeks with <u>one or more</u> or the following symptoms:

- Recent, unintentional weight loss of 5 pounds or more
- Recurrent fever of more than 100°F
- Unusual sweating, especially at night
- Ongoing fatigue
- Coughing up blood

Individuals reporting positive responses to the above criteria should be isolated from others and the TB Liaison consulted immediately for directions. These individuals may need an immediate medical evaluation.

2. TB History Screen:

Clients should be asked about a history of previous TB treatment, or a TB disease diagnosis. Individuals with such a history should be interviewed, using the questions listed in the TB Symptom Screen or using a TB Symptom Questionnaire (which can be obtained from San Diego County TB Control), and the results recorded. Intake staff should consult with the TB Liaison for the appropriate action.

3. TST Screening:

In low risk persons without HIV infection, a TST reaction measured as **10mm or greater** induration indicates TB infection.

TST should be required, of all individuals, except for the following situations:

a. A previous positive TST is documented:

TST's do not need to be repeated if written documentation of a positive TST (**10mm or greater**) is presented by the individual. This documentation should include the TST date, size of reaction, and indication that it was a Mantoux-method TST. If there is no available documentation, a repeat TST should be done. Some individuals may resist repeat testing, occasionally for valid medical reasons. These individuals should be referred to a medical facility for a TST history review.

b. A recent negative TST history (**less than 10mm**), done within the previous 3 months and documented, does not need to be repeated.

4. Chest x-ray follow-up for persons with positive TST results:

To differentiate TB infection from TB disease (possible communicability), such patients must be further evaluated by chest x-ray as soon as possible after the TST

reading, and within 7 days of admission. A chest x-ray is not necessary if the individual presents documentation of a normal chest x-ray, taken within the previous 3 months.

- a. An abnormal chest x-ray, consistent with active TB disease, requires an immediate evaluation by a medical provider.
- b. A normal chest x-ray indicates no active pulmonary TB disease. These individuals should, however, have a medical evaluation to determine whether they are eligible for TB prevention therapy (II.D. below).

D. TB Preventive Therapy:

- 1. Those in the following groups, having a positive TST, followed by a normal chest x-ray, should have a medical evaluation for possible TB prevention therapy:
 - Drug users
 - All individuals less than 35 years old
 - Contact to a TB diseased person within the last two years.
 - Persons with chronic illness (diabetes, renal failure, etc.).
 - Individuals developing a positive TST within the last two years
- 2. Some clients may have taken preventive therapy medication in the past. Those not having documentation of completing at least 6 months of this therapy and who are included in any of the categories listed immediately above (II.D.1.), should be referred for a medical evaluation.
- 3. Follow-up for Persons Needing a Medical Evaluation:
 - a. <u>Residential programs</u> should assist clients in receiving a medical evaluation with a medical care provider within 45 days of admission. Any client recommended to take prevention therapy should be monitored for their daily compliance with this treatment until completed or client discharge from the program.
 - b. <u>Outpatient programs</u> should refer clients to their medical provider for a medical evaluation.

III. TB Screening of Persons At-Risk for HIV Infection

- A. This category includes persons with HIV risk factors without an HIV negative test within the last 6 months.
- B. All individuals should be screened for the following criteria before admission and their responses recorded.
 - 1. TB Symptom Screen:

Cough lasting more than 3 weeks with one or more or the following symptoms:

- Recent, unintentional weight loss of 5 pounds or more
- Recurrent fever of more than 100°F
- Unusual sweating, especially at night
- Ongoing fatigue
- Coughing up blood

Individuals reporting positive responses to the above criteria should be isolated from others and the TB Liaison consulted immediately for directions. These individuals may need an immediate medical evaluation.

2. TB History Screen:

Clients should be asked about a history of previous TB treatment, or a TB disease diagnosis. Individuals with such a history should be interviewed, using the questions listed in the TB Symptom Questionnaire, and the results recorded. Intake staff should consult with the TB Liaison for the appropriate action.

3. TST Screening:

In low risk persons without HIV infection, a TST reaction measured as **5mm or greater** induration indicates TB infection.

TST should be required, of all individuals, except for the following situations:

a. A previous positive TST is documented:

TST's do not need to be repeated if written documentation of a positive TST (5mm or greater) is presented by the individual. This documentation should include the TST date, size of reaction, and indication that it was a Mantoux-method TST. If there is no available documentation, a repeat TST should be done. Some individuals may resist repeat testing, occasionally for valid medical reasons. These individuals should be referred to a medical facility for a TST history review.

b. A recent negative TST history (**less than 5mm**), done within the previous 3 months and documented, does not need to be repeated.

4. Chest x-ray follow-up for persons with positive TST results:

To differentiate TB infection from TB disease (possible communicability), such patients must be further evaluated by chest x-ray as soon as possible after the TST reading, and within 7 days of admission. A chest x-ray is not necessary if the individual presents documentation of a normal chest x-ray, taken within the previous

3 months.

- a. An abnormal chest x-ray, consistent with active TB disease, requires an immediate evaluation by a medical provider.
- b. A normal chest x-ray indicates no active pulmonary TB disease. These individuals should, however, have a medical evaluation to determine whether they are eligible for TB prevention therapy (III.D. below).

D. TB Preventive Therapy:

- 1. Those in the following groups, having a positive TST, followed by a normal chest x-ray, should have a medical evaluation for possible TB prevention therapy:
 - Drug users
 - All individuals less than 35 years old
 - Contact to a TB diseased person within the last two years.
 - Persons with chronic illness (diabetes, renal failure, etc.).
 - Individuals developing a positive TST within the last two years
- 2. Some clients may have taken preventive therapy medication in the past. Those not having documentation of completing at least 6 months of this therapy and who are included in any of the categories listed immediately above, should be referred for a medical evaluation.
- 3. Follow-up for Persons Needing a Medical Evaluation:
 - a. Residential programs should assist clients in receiving a medical evaluation with a medical care provider within 45 days of admission. Any client recommended to take prevention therapy should be monitored for their daily compliance with this treatment until completed or client discharge from the program.
 - b. <u>Outpatient programs</u> should refer clients to their medical provider for a medical evaluation.

IV. TB Screening of Persons with HIV Infection

- A. This category includes persons with a positive HIV test or AIDS diagnosis.
- B. Mandatory Chest X-ray:

HIV infected persons may be unable to develop a positive TST when infected with TB due to immunosuppression. These individuals are at increased risk of developing TB disease. Therefore, the following guidelines should be instituted:

1. All HIV-infected individuals (residents, staff, and volunteers) should obtain a chest

x-ray, regardless of their TST results, before coming into a residential facility.

- 2. To guarantee no barrier to service, HIV positive individuals who are TST negative, and sent to the County TB Control Clinic for a chest x-ray, should have a notation of "Special Medical Condition" on the program's x-ray referral form.
- C. All individuals should be screened for the following criteria before admission and their responses recorded.
 - 1. TB Symptom Screen

Cough lasting more than 3 weeks with <u>one or more</u> or the following symptoms:

- Recent, unintentional weight loss of 5 pounds or more
- Recurrent fever of more than 100°F
- Unusual sweating, especially at night
- Ongoing fatigue
- Coughing up blood

Individuals reporting positive responses to the above criteria should be isolated from others. Immediately consult the program TB Liaison for instructions. These individuals may need an immediate medical evaluation.

2. TB History Screen:

Before or at admission, clients should be asked about a history of previous TB treatment, or TB diagnosis. If the person has been diagnosed with or treated for TB disease in the past, intake staff should consult with the program TB Liaison for the appropriate action.

3. TST Screening:

A TST should be required, of all individuals, except for the following situations:

a. A previous positive TST is documented:

TST's do not need to be repeated if written documentation of a positive TST (5mm or greater) is presented by the individual. This documentation should include the TST date, size of reaction, and indication that it was a Mantouxmethod TST. If there is no available documentation, a repeat TST should be done. Some individuals may resist repeat testing, occasionally for valid medical reasons. These individuals should be referred to a medical facility for a TST history review.

b. A recent negative TST history (**less than 5mm**), done within the previous 3 months and documented, does not need to be repeated.

D. TB Preventive Therapy:

- Unless individuals present documentation of previously completing at least
 12 months of preventive therapy, all TST positive / HIV infected clients with a normal chest x-ray should be referred to their medical care provider for possible TB preventive therapy.
- 2. Follow-up for Persons Needing a Medical Evaluation:
 - a. <u>Residential programs</u> should assist clients in receiving a medical evaluation with a medical care provider within 45 days of admission. Any client recommended to take prevention therapy should be monitored for their daily compliance with this treatment until completed or client discharge from the program.
 - b. <u>Outpatient programs</u> should refer assist these clients in receiving a medical evaluation with their medical provider within 45 days of admission.

V. TST Periodic Surveillance

Routine annual screening for all staff, volunteers and clients is recommended unless the TB Control Program recommends it be more frequent. This screening should include the following:

- 1. TB symptom review
- 2. Repeat TST for individuals previously TST negative at initial screening

DATA COLLECTION

To monitor TB statistics among drug treatment program clients, the following data should be collected:

- **I. TST result** (recorded in millimeters)
- **II. TST date** (monitors the interval between admission date and TST date)
- **III.** Chest x-ray date (monitors the interval between admission date and chest x-ray date)
- IV. Medical evaluation / treatment outcome